

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Takashi Nakatsuyama
Application No. 10/725,149
Filed: 12/01/2003
Title: RECEIVER FOR USER-DEMAND INFORMATION AND
ENTERTAINMENTS SYSTEM USING WIDE AREA DIGITAL
BROADCAST

Art Unit: 2426

Examiner: Jun Fei Zhong

Confirmation No.: 1767

Via EFS Web
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<p>Certificate of Electronic Transmission <u>Under 37 C.F.R. §1.8</u></p> <p>I hereby certify that this correspondence and any document referenced herein are being electronically filed with the USPTO via EFS-Web on <u>3/16/2010</u>.</p> <p><u>Marjorie Scariati</u> (Printed Name of Person Sending Correspondence)</p> <p><u>/ Marjorie Scariati /</u> (Signature)</p>
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APPEAL BRIEF UNDER 37 C.F.R. §41.37

Sir:

Further to the Notice of Noncompliant Appeal Brief, mailed on February 16, 2010, Appellants hereby appeal the final decision of the Examiner in the above-identified application rejecting Claims 1-14. In addition, any deficiencies may be charged to Deposit Account No. 50-1047.

Appellants respectfully request that the Board of Patent Appeals and Interferences reverse the Examiner's rejection of the claimed subject matter.

I. REAL PARTY IN INTEREST

Sony Corporation and Sony Electronics Inc. are the assignees of the present invention and the real parties in interest.

II. RELATED APPEALS AND INTERFERENCES

No prior and pending appeals, judicial proceedings or interferences are known to the appellant which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

The presently pending claims are Claims 1-14. Claims 15-20 have been previously cancelled.

Claims 1-14 are on appeal. A copy of appealed Claims 1-14 is provided in the attached Appendix.

Appellant hereby appeals the final decision of the Examiner in the above-identified application rejecting Claims 1-14.

IV. STATUS OF AMENDMENTS

A Final Office Action was mailed on May 11, 2009, rejecting Claims 1-14. Appellant responded to the Final Office Action with a Response to Final Office Action dated July 13, 2009. In an Advisory Action dated July 17, 2009, the Examiner indicated that the request for reconsideration was not entered. A Notice of Appeal was filed on October 13, 2009. No claim amendments were made subsequent to the May 11, 2009 Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 1 is directed to a method for receiving in a broadcast system, at a receiver (paragraph [0039], corresponding to page 9, lines 13-18; FIG. 1, 40, FIG. 2) having a unique identification number (paragraph [0025], lines 3-4, corresponding to page 5, lines 17-18; paragraph [0042], lines 7-11, corresponding to page 10, lines 17-21), only designated information (paragraph [0067], lines 2-4, corresponding to page 16, lines 1-3; FIG. 9, 922;

paragraph [0051], lines 7-8, corresponding to page 12, lines 14-15 (FIG. 2)), the method comprising the steps of:

monitoring a broadcast index signal containing tuning data (paragraph [0067], lines 1-2, corresponding to page 15, line 31 – page 16, line 1; FIG. 9, 920; paragraph [0051], lines 3-4, corresponding to page 12, lines 10-11 (FIG. 2));

detecting the unique identification number associated with the receiver in the broadcast index signal (paragraph [0067], lines 2-4, corresponding to page 16, lines 1-3; FIG. 9, 922; paragraph [0051], lines 7-8, corresponding to page 12, lines 14-15 (FIG. 2));

downloading the tuning data subsequent to detecting the unique identification number in the detecting step (paragraph [0067], lines 2-4, corresponding to page 16, lines 1-3; FIG. 9, 922; paragraph [0051], line 8, corresponding to page 12, line 15 (FIG. 2));

storing the downloaded tuning data in memory (paragraph [0067], lines 2-4, corresponding to page 16, lines 1-3; FIG. 9, 922; paragraph [0051], lines 8-9, corresponding to page 12, lines 15-16 (FIG. 2)); and

tuning and receiving a program signal containing program data associated with a program using the tuning data stored in said storing step (paragraph [0067], lines 2-4, corresponding to page 16, lines 1-3; FIG. 9, 924; paragraph [0051], lines 9-10, corresponding to page 12, lines 16-17 (FIG. 2)).

Independent Claim 7 is directed to a method for requesting and receiving designated information (paragraph [0067], lines 2-4, corresponding to page 16, lines 1-3; FIG. 9, 922; paragraph [0051], lines 7-8, corresponding to page 12, lines 14-15 (FIG. 2)), in a broadcast system, at a transceiver having a unique identification number (paragraph [0039], corresponding to page 9, lines 13-18; FIG. 1, 40, FIG. 2; paragraph [0025], lines 3-4, corresponding to page 5, lines 17-18; paragraph [0042], lines 7-11, corresponding to page 10, lines 17-21), the method comprising the steps of:

transmitting to a wireless communication system a request signal, the request signal including the unique identification number and a request for a program (paragraph [0076], lines 2-3, corresponding to page 18, lines 2-3; FIG. 5, 234); FIG. 10, 1004);

receiving from the wireless communication system a broadcast index signal containing the unique identification number associated with the receiver and tuning data (paragraph [0076], lines 7-10, corresponding to page 18, lines 1-10; FIG. 5, 232);

storing the tuning data in memory (paragraph [0080], lines 2-4, corresponding to page 19, lines 11-13; FIG. 6, 268); and

receiving a program signal containing program data, associated with a program, using the stored tuning data (paragraph [0076], lines 11-12, corresponding to page 18, lines 1-12; FIG. 5, program data signal 36).

Independent Claim 14 is directed to a method for requesting and receiving designated information (paragraph [0067], lines 2-4, corresponding to page 16, lines 1-3; FIG. 9, 922; paragraph [0051], lines 7-8, corresponding to page 12, lines 14-15 (FIG. 2)), in a broadcast system, at a first transceiver having a unique identification number (paragraph [0039], corresponding to page 9, lines 13-18; FIG. 1, 40, FIG. 2; paragraph [0025], lines 3-4, corresponding to page 5, lines 17-18; paragraph [0042], lines 7-11, corresponding to page 10, lines 17-21), the method comprising the steps of:

transmitting from the first transceiver to a wireless communication system a request signal, the request signal including the unique identification number and a request for a program (paragraph [0076], lines 2-3, corresponding to page 18, lines 2-3; FIG. 5, 234); FIG. 10, 1004);

receiving at the first transceiver, from the wireless communication system, a broadcast index signal containing tuning data (paragraph [0076], lines 7-10, corresponding to page 18, lines 1-10; FIG. 5, 232);

storing the tuning data in memory (paragraph [0080], lines 2-4, corresponding to page 19, lines 11-13; FIG. 6, 268); and

receiving a program signal containing program data, associated with a program, using the stored tuning data (paragraph [0076], lines 11-12, corresponding to page 18, lines 1-12; FIG. 5, program data signal 36).

VI. GROUNDS OF REJECTION TO BE REVIEWED UPON APPEAL

Appellant presents the following issues for review:

A. Would the subject matter of appealed Claims 1-2 and 6 have been anticipated under 35 USC 102(b) by US Patent 5,659,350 (Hendricks '350); would the subject matter of appealed dependent Claims 3-4 have been unpatentable under 35 USC 103(a) over Hendricks '350 in view of US Patent 6,178,447 (Wannenmacher et al.); and would the subject matter of dependent Claims 5 and 10 have been unpatentable under 35 USC 103(a) over Hendricks '350 in view of US Patent 6,005,597 (Barrett et al.).

B. Would the subject matter of appealed Claims 7-9 and 11-14 have been anticipated under 35 USC 102(e) by US Patent 7,134,131 (Hendricks '131.).

VII. ARGUMENT

A. Would the subject matter of appealed Claims 1-2 and 6 have been anticipated under 35 USC 102(b) by US Patent 5,659,350 (Hendricks ‘350); would the subject matter of appealed dependent Claims 3-4 have been unpatentable under 35 USC 103(a) over Hendricks ‘350 in view of US Patent 6,178,447 (Wannenmacher et al.); and would the subject matter of dependent Claims 5 and 10 have been unpatentable under 35 USC 103(a) over Hendricks ‘350 in view of US Patent 6,005,597 (Barrett et al.).

The Examiner’s reasoning does not meet the burden of establishing a *prima facie* case of anticipation as to Claims 1-2 and 6. As explained in Applicant’s specification as filed, in a method according to Applicant’s teachings, “index data is continuously and repeatedly broadcast over the entire area” (para. [0049]) –and “receiver 40 is alerted that tuning data 104 follows on index data signal 34 when it detects its identifier 102” –“receiver 40 then downloads tuning data 104, stores the tuning data in memory 68 and uses the tuning data to receive information the user requested in user profile data 16” (para. [0051]). Hendricks ‘350 fails to teach these features.

Independent Claim 1

Independent Claim 1 is directed to a method for receiving in a broadcast system, at a receiver having a unique identification number, only designated information, the method including the steps of: monitoring a broadcast index signal containing tuning data, detecting the unique identification number associated with the receiver in the broadcast index signal, downloading the tuning data subsequent to detecting the unique identification number in the detecting step, storing the downloaded tuning data in memory and tuning and receiving a program signal containing program data associated with a program using the tuning data stored in the storing step.

Applicant respectfully submits that Hendricks ‘350 fails to teach or suggest a method for *monitoring(at a receiver having a unique identification number) a broadcast index signal containing tuning data, AND then downloading only designated information (at the receiver having a unique identification number) upon ‘detecting the unique identification number associated with the receiver, in the broadcast index signal’.*

Applicant submits that even if Hendricks '350 may include a "set top terminal identifier 928" in program information signal 276 – it does *not teach, or even suggest*, that the program information signal 276 is "***monitored***" by the receiver – such that the corresponding set top ***detects*** the unique identification number, and only then downloads the tuning data. Applicant respectfully submits that even *if* Hendricks '350 describes 'transmitting' identifier 928 – it does not teach or suggestion Applicant's claimed limitation of '*detecting*' the unique identification number associated with the receiver in the broadcast index signal, and downloading the tuning data subsequent to detecting the unique identification number in the detecting step.

The "data format 920" shown in Fig. 6a-6b of Hendricks '350 includes a "set top terminal identifier 928 that *includes a polling command/response (or P/F) bit 930*". This P/F bit is simply used "to ***command a polling response*** 920" (FIG. 6b) from the set top terminal 220 addressed" (col. 21, lines 4-5, emphasis added herein).

Set top terminal 220 does not "***monitor***" signal 276 to detect identifier 928.

For support of the "monitoring" step recited in Claim 1, the Final Office Action (page 4) again directs Applicant to: col. 9, lines 42-60 of Hendricks '350 – which describes only the 'poll-back responses' which allow network controller 214 to maintain accurate billing information; col. 17, lines 50-60 of Hendricks '350, which merely describes TABLE A, which illustrates information that *can be sent* in the program control information signal to set top terminals – this does not suggest monitoring a signal for a unique identification number; col. 19, lines 30-41 of Hendricks '350, which describe TABLE B, or an "events table" that may be downloaded to a set top terminal; and finally, Applicant is directed to col. 20, lines 50-58, describing Figs. 6a and 6b of Hendricks '350, showing a data format for a program information signal, which includes a set top terminal identifier 928.

Again, Applicant respectfully submits that none of these sections of Hendricks '350 teach or suggest '*monitoring* a broadcast signal containing tuning data" - such that the set top, subsequent to detection of the unique identification number in the broadcast signal– downloads and stores the tuning data. Hendricks '350 does not teach or suggest at least this element of independent Claim 1.

The Final Action, in response to Applicant's previous arguments (para. bottom of page 2-top of page 3 of the Action), states that "Hendricks ('350) discloses using a 4-bit address or a 16-bit set top terminal identifier in the information signal 276 sends from headend to set top

terminal. And the information signal 276 is designates to specify set top terminal only (see col. 20, line 50 – col. 21, line 15)” (repeated once again in the 7/17/09 Advisory Action, page 2).

Again, *set top terminal 220* does not “monitor” signal 276 to detect identifier 928 – rather, P/F bit 930 (of set top terminal identifier 928) is simply used “to **command a polling response**” from the set top terminal 220 addressed (col. 21, lines 4-5).

As explained at col. 36, lines 7-11, after packaging, the packaged television program signal is prepared for satellite transmission and sent from the operations center 202 to the cable headend 208 via satellite 206. Signals are transmitted “to the cable headend 208 where a computer system including a digital switch treats the signal and delivers it through cables to a subscriber’s home” (col. 36, lines 52-55).

There is absolutely no teaching or suggestion in Hendricks ‘350 that the set top terminal at the subscriber’s home ‘monitors’ signal 276 for a unique identification number.

For at least the foregoing reasons, Applicant again respectfully submits that independent Claim 1 is patentable over Hendricks ‘350 and reconsideration is requested.

B. Would the subject matter of appealed Claims 7-9 and 11-14 have been anticipated under 35 USC 102(e) by US Patent 7,134,131 (Hendricks'131.).

The Examiner's reasoning does not meet the burden of establishing a *prima facie* case of anticipation. As explained in Applicant's specification as filed, in a method according to Applicant's teachings, "index data is continuously and repeatedly broadcast over the entire area" (para. [0049]) – and "receiver 40 is alerted that tuning data 104 follows on index data signal 34 when it detects its identifier 102" – "receiver 40 then downloads tuning data 104, stores the tuning data in memory 68 and uses the tuning data to receive information the user requested in user profile data 16" (para. [0051]). Hendricks '131 fails to teach or suggest these features.

Independent Claim 7

Independent Claim 7 is directed to a method for requesting and receiving designated information in a broadcast system, at a transceiver having a unique identification number, the method including the steps of: transmitting to a wireless communication system a request signal, the request signal including the unique identification number and a request for a program; receiving from the wireless communication system a broadcast index signal containing the unique identification number associated with the receiver and tuning data; storing the tuning data in memory; and receiving a program signal containing program data, associated with a program, using the stored tuning data.

The Final Action directs Applicant to "col. 41, line 48-col. 45, line 20" of Hendricks '131 as providing support for the recited step of "receiving from the wireless communication system a broadcast index signal containing the unique identification number associated with the receiver and tuning data". Applicant respectfully submits that this cited section of Hendricks '131 (and the remainder of Hendricks '131) fails to teach or suggest receiving a broadcast index signal containing the unique identification number associated with the transceiver and tuning data. Applicant can find no teaching that the "program control information signal" generated by the operations center 202 *contains the unique identification number associated with the set top terminal*. Further specific clarification as to the teachings of this element was respectfully requested in the last Response – the Advisory Action failed to provide any clarification.

Again (as in Hendricks ‘350), in Hendricks ‘131, a set top terminal identifier 928 includes a polling command/response (or P/F) bit 930, that is used for polling purposes -- there is no teaching or suggestion that this identifier 928 is used to monitor and receive, from a wireless communication system, a broadcast index signal containing this unique identifier associated with the receiver. As explained at least at col. 45, lines 42-45 of Hendricks ‘131, “program access information for each program watched is stored at the set top terminal 220 until it is polled by the network controller 214 for information retrieval using the program control information signal or STTCIS....[this] can be accomplished by using the polling request message and response formats..., but any suitable polling request and response message format may be used to interrogate each set top terminal 220 sequentially, one by one...[t]he set top terminals 220 are identified by a unique address and set top terminal identifier”.

Again, Applicant respectfully submits that Hendricks ‘131 fails to teach or suggest receiving only broadcast index signals that contain the unique identification number associated with the transceiver and tuning data. While the section of Hendricks ‘131 that describes the program control information signal (col. 41, line 48 – col. 45, line 20) may note that an ‘event ID’ or ‘global channel ID’ is included in TABLE B, it does *not teach or suggest* that the transceiver receives from the wireless communication system a broadcast index signal *containing the **unique identification number*** associated with the receiver and tuning data, and stores only the corresponding tuning data in memory.

For at least the foregoing reason, Applicant respectfully submits that each of independent Claims 7 and 14 is patentable over Hendricks ‘131.

In addition, Appellants respectfully submit that dependent Claims 2-6 and 8-13 are patentable over the art of record for at least the same reasons as those presented with regard to Claims 1 and 7, one or the other from which they depend, and as reciting additional limitations that even further distinguish over the art of record.

CONCLUSION

The references relied upon by the Examiner do not support a *prima facie* case of anticipation as to Claims 1-2, 6-9 and 11-14, and a *prima facie* case of obviousness as to Claims 3-5 and 10. Appellant submits that the pending claims, Claims 1-14 are patentable over the art of record and it is respectfully requested that the Board reverse the final rejection of the subject matter of these claims for the reasons given above.

Respectfully submitted,

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VIII. Claims Appendix

1. A method for receiving in a broadcast system, at a receiver having a unique identification number, only designated information, the method comprising the steps of:
monitoring a broadcast index signal containing tuning data;
detecting the unique identification number associated with the receiver in the broadcast index signal;
downloading the tuning data subsequent to detecting the unique identification number in the detecting step;
storing the downloaded tuning data in memory; and
tuning and receiving a program signal containing program data associated with a program using the tuning data stored in said storing step.
2. The method of claim 1, wherein the tuning data includes a reference time at which the program data is broadcast in the program signal, and further comprising the step of:
tuning to the program signal at approximately the reference time.
3. The method of claim 1, wherein a tuning time is associated with the identification number of the receiver, and further comprising the steps of:
configuring the receiver to operate in at least a first state during which the receiver monitors the index signal just prior to the tuning time, and a second state during which the receiver does not monitor the index signal.
4. The method of claim 3 further comprising the step of:
causing the receiver to enter a power saving mode during at least a portion of the second state.
5. The method of claim 1 further comprising the steps of: outputting a foreground program upon receiver power-on, and outputting a background program subsequent to the user selecting the background program for output.

6. The method of claim 1, wherein either or both the broadcast index signal and the program signal include data used to present a menu of new programs and/or updates to programs broadcast on the program signal.

7. A method for requesting and receiving designated information in a broadcast system, at a transceiver having a unique identification number the method comprising the steps of:

transmitting to a wireless communication system a request signal, the request signal including the unique identification number and a request for a program;

receiving from the wireless communication system a broadcast index signal containing the unique identification number associated with the receiver and tuning data;

storing the tuning data in memory; and

receiving a program signal containing program data, associated with a program, using the stored tuning data.

8. The method of claim 7 wherein either or both of the broadcast index signal and the program signal include data, representing new programs and/or updates to programs broadcast on the program signal, the method further comprising the step of:

presenting a menu of program choices to a user on a display.

9. The method of claim 8, wherein the request signal transmitted in said transmitting step is associated with a selection by the user from the menu of program choices.

10. The method of claim 7, further comprising the steps of:

outputting a foreground program upon receiver power-on, and outputting a background program subsequent to the user selecting the background program for output.

11. The method of claim 7 further comprising the steps of:

outputting an order form on a display and transmitting an order associated with the order form for goods and/or services.

12. The method of claim 11 further comprising the step of outputting an invoice on the display.

13. The method of claim 8, further comprising the step of transmitting a payment by the user.

14. A method for requesting and receiving designated information in a broadcast system, at a first transceiver having a unique identification number, the method comprising the steps of:

transmitting from the first transceiver to a wireless communication system a request signal, the request signal including the unique identification number and a request for a program;

receiving at the first transceiver, from the wireless communication system, a broadcast index signal containing tuning data;

storing the tuning data in memory;

receiving a program signal containing program data, associated with a program, using the stored tuning data; and

transmitting at least a portion of the stored tuning data from the first transceiver to a second transceiver.

IX. Evidence Appendix

None.

X. Related Proceedings Appendix

None.